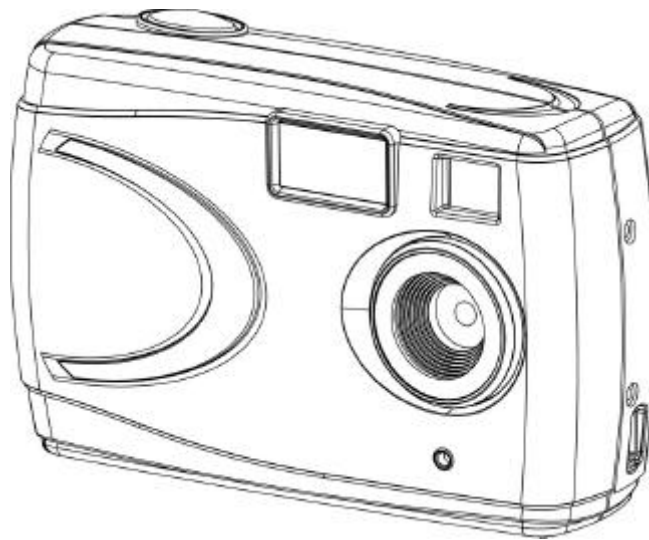**Vivitar**

ViviCam 3345

1.3 Mega Pixel Digital Camera

Owner's Manual

ViviCam 3345 User Manual

This manual is designed to assist you in using the ViviCam 3345. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the absolute correctness of the contents. The information in this document is subject to change without notice. © Copyright 2004 Vivitar Corporation.

Federal Communications Commission (FCC) Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note!
Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules. Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Declaration of Conformity

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:

- o This device may not cause harmful interference.
- o This device must accept any interference received, including interference that may cause undesired operation.

Canadian Department of Communications

- o This class B digital apparatus meets all requirements of the Canadian Interference-causing Equipment Regulations.
- o Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilieur du Canada.

Trademark Recognition

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General Warnings

When fitting batteries into the camera, check the polarity of the batteries (- and +) to ensure that you insert the battery correctly. Incorrect polarity may result in the batteries splitting or leaking and causing a fire, injury, or soiling of the battery compartment.

Remove the batteries if the camera will not be used for an extended period of time. The batteries may leak and cause a fire, injury or soiling of the battery compartment. If the batteries leak, clean and wipe the battery compartment carefully and install new batteries. Wash your hands carefully if you touch the battery fluid. Please note that when you remove the batteries your images will be lost from the camera memory.

WARNING: Handling the USB cable on this product may expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. Wash your hands after handling.

ViviCam 3345 User Manual - Table of Contents

Computer System Requirements

The ViviCam 3345 is designed to work with your home or office computer. To ensure proper operation your computer must meet the following requirements:

- Pentium II Class 400 MHz processor
- Windows® 98SE/ME/2000/XP
- 128MB RAM
- 300 MB free hard disk space
- USB port
- CD-ROM drive

Package Contents

Open the ViviCam 3345 package and examine the contents. Your package should contain the following items. Note, however, that items included with your camera kit may vary slightly depending upon the options selected by your camera retailer. Check with your retailer for details, as options will vary by retailer.
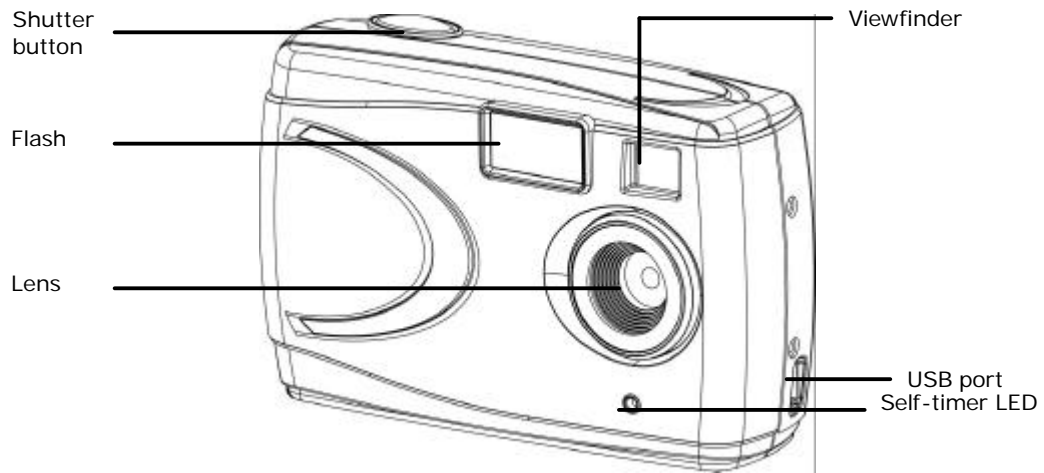
- Vivicam 3345
- Camera wrist strap
- 2 AA batteries
- USB cable
- Quick Start Guide
- Software CD containing:
    - o ViviCam 3345 Driver
    - o Owner's Manual (PDF)
    - o Ulead Image Explorer 8.0 SE
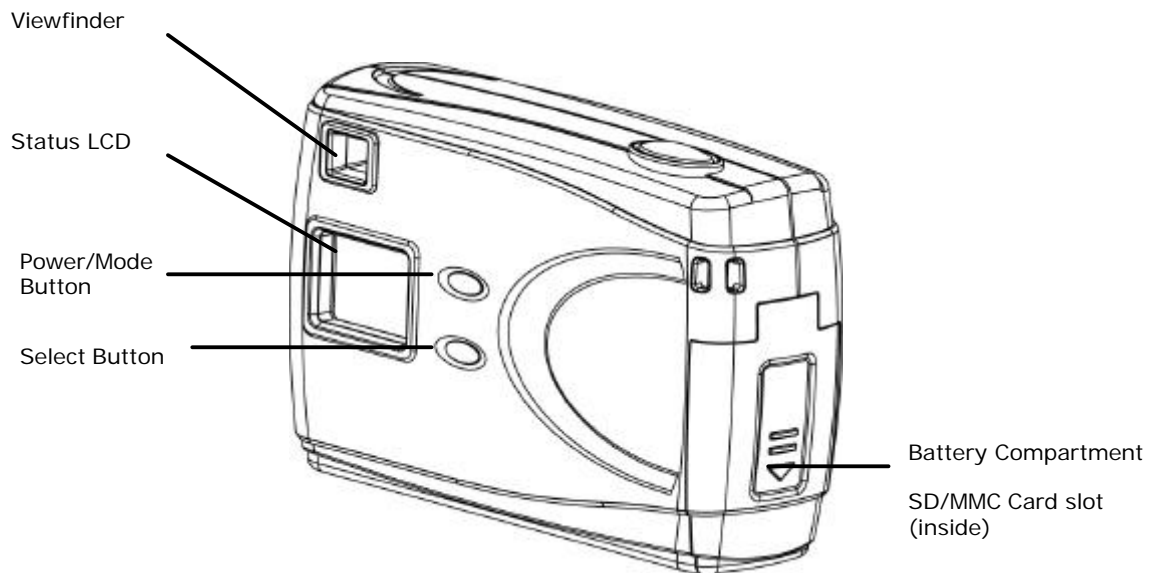   - o Ulead COOL 360
    - o Adobe Acrobat Reader

Camera Features

Please refer to the following diagrams to identify the features of the ViviCam 3345:

Front View

Shutter button

Flash

Lens

Viewfinder

USB port
Self-timer LED

Rear View

Viewfinder

Status LCD

Power/Mode Button

Select Button

Battery Compartment

SD/MMC Card slot (inside)

Inserting and Removing an SD or MMC Memory Card

The ViviCam 3345 accepts a Secure Digital (SD) or a MultiMedia Card (MMC) memory card up to 256MB capacity. The memory card takes priority over the internal memory. Whenever a memory card is inserted the camera will immediately use the memory card in preference to the internal memory. Therefore, when a memory card is inserted, the camera will store images and videos on the memory card. Likewise, the camera will playback images and videos that are stored on the memory card only. To access internal memory remove the memory card.

Inserting a Memory Card

1. Insert an SD or MMC card into the memory card slot located on the side of the camera, and gently press down with your finger.

Removing a Memory Card

1. Gently press down on the memory card and it will partially eject. Pull the card out with your fingers.

Note: To use the internal memory (8MB), please remove the memory card first.
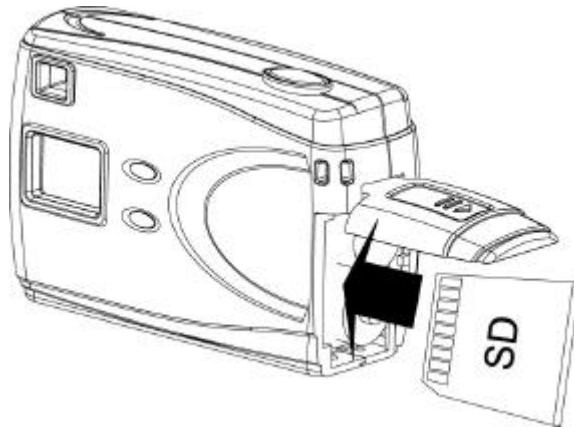
Powering the Camera ON/OFF

- To turn the ViviCam 3345's power ON, press and hold the ⏻/🔲 button for three to four seconds. The camera will beep and the status LCD will display camera status information.
- To turn the ViviCam 3345's power OFF, press and hold the ⏻/🔲 button for three (3) seconds and the status LCD will shut off.

> Note: *The ViviCam 3345 automatically powers off after 60 seconds of inactivity.*

Camera Icons and Descriptions

The Power/Mode Button ⏻/🔲	
Icons	**Descriptions**
📷	**Capture Mode** for capturing digital still images
888	**Number** of images that you may capture in the available memory
🎥	**Movie Mode** for capturing video clips
*888*_{sec}	**Time** (maximum duration) of a video that may be captured in the available memory
★★★	**Resolution** settings for still images ? ? ? 1600 x 1200 (2 mega-pixel images, using internal interpolation) ? ? 1280 x 1024 (native 1.3 mega-pixel resolution of the camera) ? 640 x 480 (VGA, reduced resolution – for capturing more images)
⏱	**Self-timer** allows 10 seconds to capture an image *Note: The self-timer function uses two-star (1280 x 1024) resolution setting ONLY*
🔋	**Battery** level indicator: 3 segments: battery is full 2 segments: battery is half full 1 segments: battery is low; flash is disabled 0 segments: battery is near empty; the icons on the status LCD will flash
PCC	**PC / Web Cam mode.** Set the camera to "PCC" before connecting to your PC to use the PC camera function.
PC	**PC-connection** – camera is connected to a computer with the USB cable

The Select Button 𝟰/🗑	
Icon	**Descriptions**
AUTO ⚡	**Automatic Flash:** The flash will fire if there is insufficient ambient light

Note: The flash icon blinks when the flash capacitor is charging. Wait for the icon to stop blinking before capturing an image. |
| ⊗ | **Flash OFF:** The flash will not fire in any lighting condition |
⚡	**Flash ON:** The camera will flash regardless of lighting conditions
🏠	**Indoor Exposure:** For taking images indoors
👤	**Outdoor Exposure:** For taking images outdoors
🗑 ALL	**Delete ALL:** Deletes all images and/or videos saved in the camera memory or on a memory card
🗑 LAST	**Delete LAST:** Deletes the last image or video stored on the camera or the memory card

Capturing Digital Still Images

1. Press and hold the ⏻/🅼 button for three to four seconds to power on the camera.

2. Press the ⏻/🅼 button again to select the desired image resolution:

   ★★★   Superfine   1600 x 1200   (2 MP interpolated)
   ★★   Fine   1280 x 1024   (1.3 MP native resolution)
   ★   Economy   640 x 480   (VGA, reduced resolution)

   The "Fine" resolution setting (1280 x 1024) is suggested for general use. The superfine resolution will yield a 2 mega-pixel image (1600 x 1200) that is generated (calculated) by a process called interpolation, inside the camera. Superfine images will include finer detail than their 1.3 mega-pixel equivalents, however, they will consume more memory space. Images captured in Economy (640 x 480) will have noticeably less detail but require less memory space in the camera. Try capturing some images in all three resolutions and compare the results.
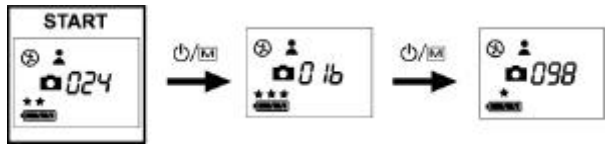
3. Frame your subject through the viewfinder.

4. Hold the camera steady and press the Shutter button firmly to capture an image. The camera will beep to confirm that the image has been captured, and the status LCD will decrement by one, displaying the number of images that can be captured in the remaining available memory.

Using the Flash

1. Press the ⏻/🅼 button to select the desired resolution.

2. Press the Select (⚡/🗑) button to toggle through the following options and select your desired flash and exposure settings:

   Flash OFF/Outdoor ? Auto flash/Outdoor ? Flash OFF/Indoor ? Auto flash/Indoor ? Flash ON/Indoor ? Flash ON/Outdoor.
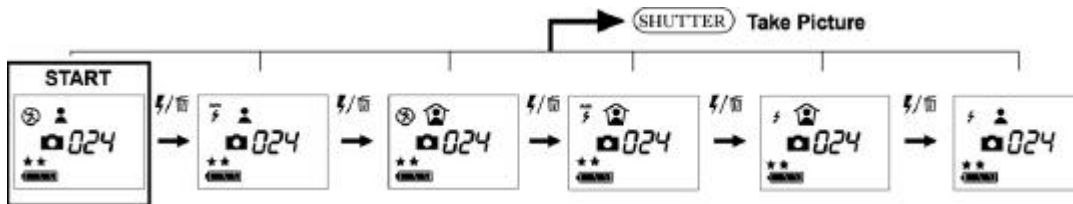
3. Frame your subject through the viewfinder.

4. Hold the camera steady and press the Shutter button firmly to capture an image.

Note:

- *If the flash is charging , the flash icon on the status LCD will blink. The camera will not capture an image while this icon is blinking. Wait for the icon to stop blinking before capturing an image.*

- *The flash will yield best results when the subject is 5 to 6.5 feet (1.5 to 2 meters) away from the camera. The image may be over exposed if you hold the camera too close to your subject (e.g. less than 5 feet or 1.5 meters away.)*

- *The camera will not flash if the battery indicator shows only one segment. Change or recharge the battery to replenish power before using the camera with the flash.*

Using the Self-timer

1. Press the ⏻/🅼 button three times to the self-timer icon ⏱. The camera will automatically adjust to the native (two-star) resolution setting.
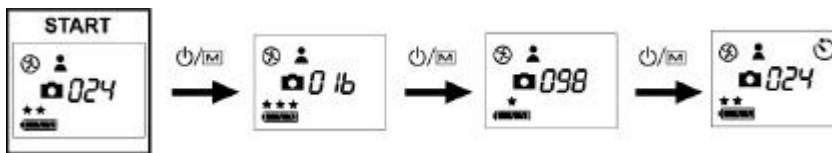
2. Place your camera on a tripod (or a flat surface) and frame the subject through the viewfinder.

3. Press the Select (⚡/🗑) button to select your desired flash and exposure settings.

4. When ready to capture an image, press the Shutter button once to start the timer. The camera will beep and the red LED will blink slowly. As the time counts down to 10 seconds, the camera will beep and flash faster.

Note: The self-timer function only functions at 1280 x 1024 resolution (two-stars.)

Recording Digital Video

1. Press and hold the ⏻/Ⓜ button for three to four seconds to power on the camera.


2. Press the ⏻/Ⓜ button four times to the Movie icon 🎥.

3. Press the Select (⚡/🗑) button to select the desired exposure setting:

   Indoor or Outdoor
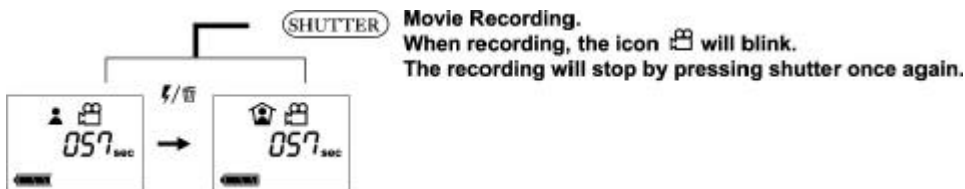
4. Frame your subject through the viewfinder and press the Shutter button once to start recording. The video icon 🎥 will blink continuously while the camera is recording a video. The status LCD will display the time remaining (in seconds) for the available memory.

5. To stop recording a video, press the Shutter button again. The status LCD will display the maximum duration of a video-clip that you can capture based upon the available memory.

Note:
- *The Movie mode does not use the flash function.*
- *If an external memory card is used, the camera will store video on the card.*

Deleting Image and Video Files

This function allows you to delete images and videos stored on your ViviCam 3345, or on a memory card.

Deleting the Last Image

1. Press and hold the Select ⚡/🗑 button for one second, and the Delete Last icon 🗑ᴸᴬˢᵀ will appear on the status LCD.

2. Press the Shutter button once to delete the last file recorded. The camera will beep to confirm that the last recorded file has been deleted.

Press ⚡/🗑 button (one sec.)

Press (SHUTTER) key to erase the last file.
(still image, AVI or Audio)
or erase all files.
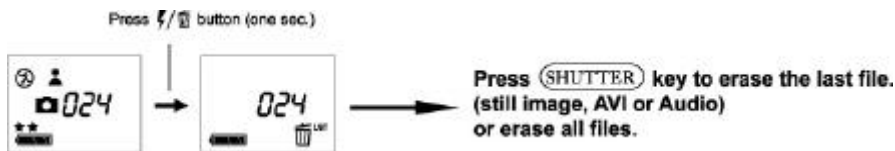
3. To return to the main screen without deleting any file, press the Select button twice. DO NOT press the Shutter button.

Deleting All Images and Videos

1. Press and hold the Select ⚡/🗑 button for one second. The Delete Last icon 🗑 LAST will appear on the status LCD. Toggle to the Delete ALL 🗑 ALL icon by pressing the Select ⚡/🗑 button again.

Press ⚡/🗑 button (one sec.)   Press ⚡/🗑 button once.

Press (SHUTTER) key to erase the last file.
(still image, AVI or Audio)
or erase all files.
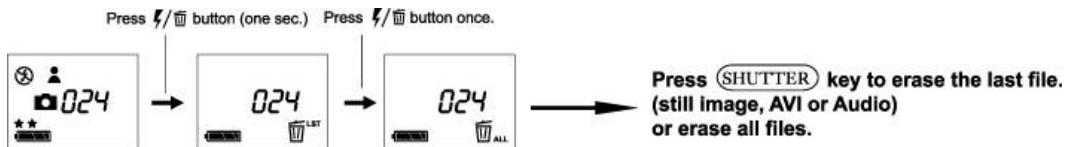
2. Press the Shutter button to delete ALL images and videos stored in the memory. The camera will beep to confirm that all files have been deleted from memory.

3. To return to the main screen without deleting any files, press the Select ⚡/🗑 button again. DO NOT press the Shutter button.

4. Please note that if a memory card is used, the camera will delete images from the memory card only. If you want to delete images from internal memory, please remove the memory card and select Delete ALL again.

Depending on the mode, the status LCD will display the following information:

Image mode: number of images that can be stored in memory
Movie mode: duration of a video that can be stored in memory (in seconds or minutes)

After a deletion the status display updates to reflect the amount of memory. Because images of different resolution (one, two, or three-stars) occupy different amounts of memory, the number of images displayed on the status LCD may or may not change.

Note: Delete ALL is the equivalent of formatting the memory card or the internal memory. Please download all your images and videos before "deleting all". Refer to the section "Downloading Files to Your PC".

Software Overview and Features

The following software and drivers are included on the CD to enhance your digital imaging experience. (The ViviCam 3345 Driver is used only for Windows 98SE users.) Windows ME, 2000, and XP users can connect their 3345 camera directly to their computer with the supplied USB cable and download their images and videos without installing any software or drivers whatsoever.

Note: Windows 98 users must install the driver software before connecting the camera to their PC for the first time.

The ViviCam 3345 CD ROM also includes several image and video editing software titles for an enhanced imaging experience. These applications are not required to operate the camera.

Adobe Acrobat Reader allows you to view PDF documents such as this manual.

ViviCam 3345 Driver for Windows 98SE

- Installs the driver for Windows 98SE users

ViviCam 3345 User Manual

- Selecting this option also installs a copy of the Owner's Manual on your computer

Adobe Acrobat Reader

- Access this *Owner's Manual* and other PDF documents

Installing Software Applications & Drivers

Insert the CD software into your computer's CD-ROM drive. The CD should auto run. If the CD does not auto run, go to Start ?   Run, and type in "d:\setup.exe" (where D:\ is your CD-ROM drive). The ViviCam 3345's Installer Menu will appear on the computer screen as shown:

Move your cursor over the software that you want to install on your computer, and click it once to begin the installation. Follow the on-screen instructions below to complete installing your software.

When installing the ViviCam 3345 driver, a progress screen will appear:

Click "Next" to start the installation.
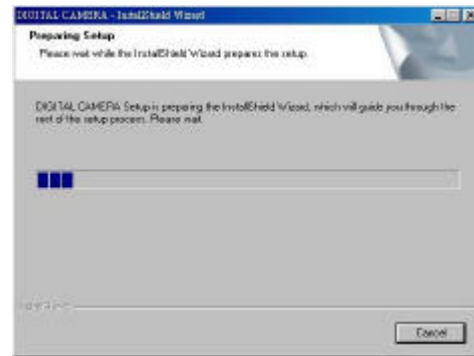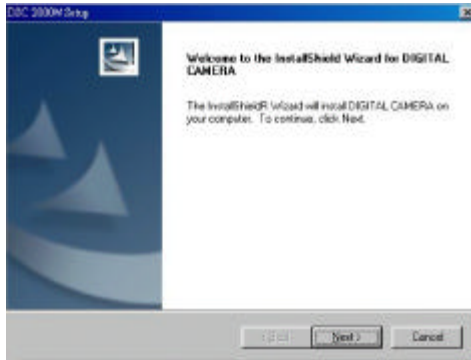
Wait for the application to install on your computer. When the installation is completed, the computer prompts you to reboot your system. Select "Yes, I want to restart my computer now" and click "Finish" to reboot your computer.
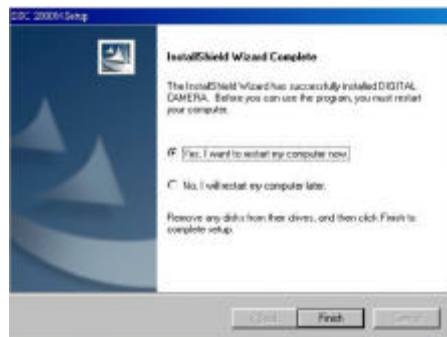
Applications. Click on the desired software application to install and follow the screen instructions to complete installation.

Acrobat Reader. Click the Acrobat Reader application to install and follow the screen instruction to complete installation.

Note: It is important that you save and close all programs before rebooting your computer.

Special Note for Windows 98SE Users. You may be prompted to restart your computer after each application is installed. When prompted by the computer to reboot, please select "No, I will restart my computer later" and click "Finish." I install all software that you desire and then reboot your PC.

Connecting to your PC

After the software installation is completed, connect the ViviCam 3345 to the computer to download the images and videos. Follow these steps:

1.   Power OFF the camera.

2.   Plug the small end of the USB cable into the USB port on the ViviCam 3345.

3.   Plug the larger end of the USB cable into the USB port of your computer.

4.   The PC will detect a new hardware upon connection, and the camera will automatically power on.

5   The camera will display ![PC] in the LCD to indicate it is connected to the computer.

DOWNLOADING IMAGES AND VIDEOS TO YOUR PC

Downloading Using the Mass Storage function

Windows 98SE Users. The driver installation must be completed before downloading files from the ViviCam 3345 to the computer.

1. Connect the ViviCam 3345 to your computer.

2. The ViviCam 3345 uses the USB "Mass Storage" approach so the computer will automatically detect the camera as a removable disk.

    For Windows XP, the Windows Wizard will launch (shown below). Select the desired oper offered by Windows to Play, Find/Fix/Share Images, Open folders to view files, Take no a Copy images to a folders on my computer, View a slideshow of the images, etc. and click
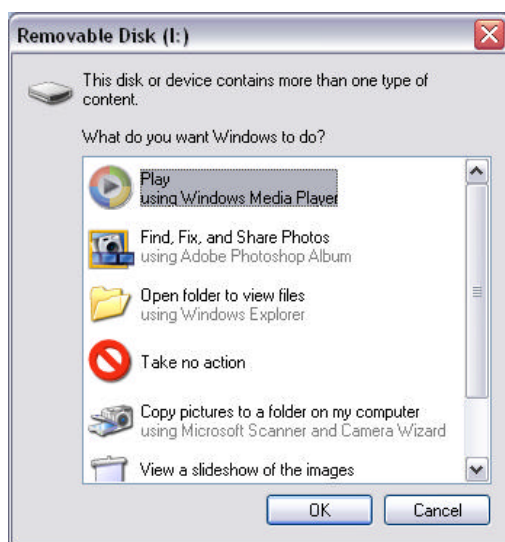
4. For Windows 98se/Me/2000, go to "My Computer" and open "Removable Disk (E:)" or perhaps another letter. Double click on the "Removable Disk" icon. Find the folder "DCIM" inside the Removable Disk. Double-click to open the next folder labeled "100MEDIA". Your image and video files are stored in this folder.

5. To transfer images to your computer, highlight the desired files, and choose one of the following methods:

    1. Copy & Paste

    - Right-click on the highlighted files with the mouse and select "Copy".

    - Go to the desired location, right-click again and select "Paste".

    2. Drag & Drop

    - Left-click on the highlighted files with the mouse and hold down on the button.

    - Drag the files to the desired location and release the button.

Camera Maintenance

Caring for Your Camera

Do not store or use the camera in the following environments:

- Very humid, dirty or dusty places

- In direct sunlight or in places subject to extreme temperatures, such as in a closed car during summer

- Extremely cold places

- Places that are subject to strong vibrations, smoke, or steam

- Places that are subject to strong magnetic fields (near motors, transformers or magnets)

- Places with chemicals such as pesticides or next to rubber or vinyl products for a long period of time

- In the rain or snow

Operational & Storage Environment

Store your ViviCam 3345 in a cool, dry place if you do not intend to use it for a long period of time. Remove the batteries if the camera will not be used for more than 10 days. Do not exceed the following temperature and humidity ranges when using and storing your ViviCam 3345.

Operating Temperature	32°F - 104°F (0°C - 40°C)
Operating Humidity	30% - 90% RH
Storage Temperature	-40°F - 158°F (-40°C - 70°C)
Storage Humidity	10% - 85% RH

Cleaning the ViviCam 3345

Use a small soft brush or lens pen to remove dust from the lens and LCD surface. Wipe the surface lightly with a soft, lint-free dry cloth. If needed, apply a small amount of lens cleaning liquid to a piece of lens cleaning paper and wipe it gently. Do not apply cleaning liquid directly to the lens. Do not touch the lens with your fingers. Do not scratch any part of the camera with sharp objects. Clean the camera's body with a soft, dry cloth. Do not use volatile substances such as thinners, benzene or insecticide, as these may react with camera body and cause deformation to the camera.

PRODUCT SPECIFICATIONS

Image sensor	1.3 Mega Pixel sensor		
Internal memory	8 MB built-in flash memory		
Image resolution	★★★ Superfine [1]	★★ Fine	★ Economy
Image resolution	1600 x 1200	1280 x 1024	640 x 480
Image capacity [2]	8 images	12 images	49 images
Video resolution	320 x 240		
Video frame rate	Variable, typically up to 8 fps		
Video capacity [2]	Up to 28 seconds (no audio)		
File format	JPEG (still images), AVI (video clips – no audio)		
Exposure	Automatic with settings for Indoor and Outdoor		
White balance	Automatic		
Lens focal length	8.8 mm		
Lens Type	Fixed focus		
Range of focus	39" to infinity (1m – infinity)		
Lens aperture	F/2.8		
Flash Modes	Automatic, on (fill), off		
Display	Monochrome status LCD		
Computer interface	USB v1.1 type B, USB v2.0 full speed compatible		
Power source	Two (2) AA battery		
Power Management	Camera powers-off after 60 seconds of inactivity		
OS support	Windows 98SE/ME/2000/XP, Mac OSX		
Camera dimension (LxWxD)	3.2 x 2.3 x 1.3 inches (91 x 57.5 x 30) mm		
Camera weight	4 ounces (80g) - Approximate, without batteries		

1. By internal interpolation. Native resolution is 1280 x 1024

2. Image and video capacity varies depending upon scene content and complexity

If any problems arise with the ViviCam 3345, refer to this troubleshooting chart:

Symptom	Possible cause	Solution
The camera doesn't turn on.	The battery is drained.	Change or recharge the battery. Also, check for correct polarity (orientation) of the batteries.
	Power button must be pressed for 3 to four seconds	Press and hold the Power button until "ON" appears in the status display
The camera won't capture a image.	Is the camera turned on?	The camera powers off automatically after 60 seconds. Make sure the camera's power is ON before taking an image.
	Is the camera connected to a computer?	The camera's buttons are not functional when connected to a PC. Disconnect the camera to capture more images.
	The light condition is insufficient.	Turn the flash mode to Flash ON.
	The camera is processing.	Wait for the camera to store files. The image number blinks at status LCD while the camera is processing and stops blinking when the camera is ready for use.
I can't download images to the PC.	Connection may have failed.	Check to ensure that all connections are secure. Look for Removable Disk under My Computer.
I get a blurred image when downloading my images to my computer.	There may be a momentary delay between pressing the shutter button and the actual exposure.	Hold your ViviCam 3345 steady until you hear a "beep" which indicates the exposure is completed.